27 SEP 1977

MEMORANDUM FOR: [redacted] 25X1

FROM: Director of Central Intelligence

SUBJECT: Contribution of Satellite Photography to Archaeology

1. Attached is a fascinating piece on the contribution of satellite photography to archaeology. Please note the penultimate paragraph's description of how we might use this to the benefit of our relations with academia.

25X1 2. I'd appreciate it if [redacted] would explore whether this is feasible and how we might best go about it.

3. I'd appreciate it if [redacted] would consider working this 25X1 into a speech sometime.

[redacted] 25X1

STANSFIELD TURNER

Attachment

25X1 cc: [redacted]

E2 IMPDET
CL BY DCI

25X1

MEMORANDUM FOR: ADMIRAL TURNER

VIA: [redacted]

1. Assume you've seen this article before, but wanted to make sure. Highlighted for quick scan.

Very respectfully,

[redacted]

25X1

19 September 1977
(DATE)

FORM NO. 101 REPLACES FORM 10-101
1 AUG 54 WHICH MAY BE USED.

(47)

STUDIES IN INTELLIGENCE

CENTRAL INTELLIGENCE AGENCY

VOL. 21 No. 1

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TR-SINT 77-001

Overhead cameras locate sites of antiquity

ROME EAST OF THE JORDAN
THE ARCHAEOLOGICAL USE OF SATELLITE PHOTOGRAPHY

Robert G. Poirier

We in the intelligence community are preoccupied with the accurate and timely reporting of information geared to assist the decision-making process at the highest levels. The importance of this primary mission makes it all too easy to overlook obvious and beneficial by-products of our work. One aspect of intelligence collection which has only begun to be exploited for its non-intelligence data is satellite imagery. Increasing emphasis is being placed upon information of environmental interest.[1] Despite this new trend, some possible uses have been overlooked or only partially examined. This paper will point out the potential value of using satellite imagery for archaeological purposes.

Satellite photography can be used to help fill the gaps in the story of man. In 1971, Dr. G. W. Bowersock of Harvard pointed out in the *Journal of Roman Studies* that archaeologists suffer from a critical lack of aerial photography in their studies of the Middle East:

> Aerial photography would be a great help. Père Poidebard showed what could be done several decades ago with his pioneering work on the traces of Rome in the Syrian desert; and Nelson Glueck has published some fine aerial photographs of Transjordan. . . . Unfortunately, at the present time photography in Transjordan is viewed by the authorities with understandable suspicion.[2]

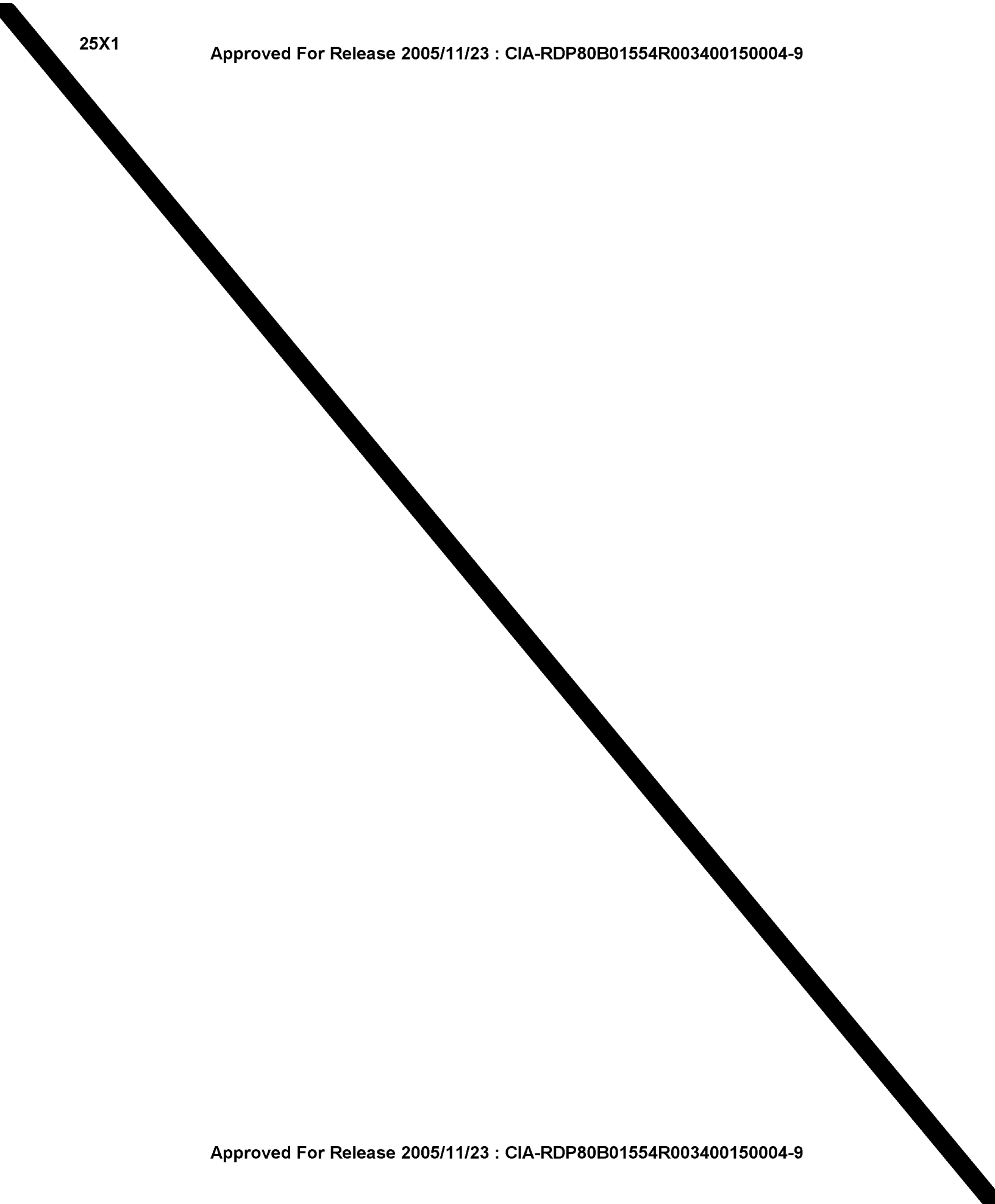
The concept of utilizing space-age photographic techniques for historical purposes is not new to the National Photographic Interpretation Center (NPIC). As early as 1970, it was pointed out that ancient sites of historical interest from many cultures could be found in all geographic areas.[3] With advances in technology, the amount of historical information obtainable is indeed vast.

Why bother to use aerial or satellite photography for archaeological purposes? Aerial photographs reveal features which are either invisible or distorted to an observer at ground level. Ancient cities, fortifications, villas, roads, and other structures have been eroded by time, destroyed by war, or in many cases vandalized for their building materials. Less substantial structures, such as wooden buildings or earthen ramparts, can easily have disappeared completely. Fortunately for the aerial observer, once a man has disturbed the ground, it never returns totally to the way it was. It is these traces, known as soil or crop marks, which are revealed to the aerial

[1] For the latest example of this see the *Utilization of U-2 Photography in the Guatemalan Earthquake*, published by the National Photographic Interpretation Center in association with the Agency for International Development, February, 1976.

[2] G. W. Bowersock, "A Report on Arabia Provincia," *Journal of Roman Studies*, Vol. XLI (London, MCMLXXI), P. CCXXXVII.

[3] Dino A. Brugioni, "The Serendipity Effect," *Studies in Intelligence*, Vol. XIV/1.



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